ENVIRONMENTAL News

Northern Division, Naval Facilities Engineering Command Spring 2000

BRAC FLASH: PHILLY TRANSFERRED

Quietly bobbing at their moorings at the former PNSY, "mothballed" Navy ships serve as a reminder of PNSY's heyday, when 50,000 Navy people there helped win WWII.

Navy Conveys Naval Shipyard, Naval Station and Naval Hospital to Philadelphia on Schedule

By Joe Roche

Head, Compliance Management Branch

The Department of the Navy conveyed the Philadelphia Naval Shipyard and the Naval Station Philadelphia to the City of Philadelphia on March 30. These facilities were designated for closure in the 1991 and 1995 rounds of Defense Base Realignment and Closure (BRAC). The Naval Shipyard closed on September 30, 1996, and the Naval Station closed on September 30, 1995.

The conveyed property covers about 1,170 acres on League Island within the City of Philadelphia. It contains 450 buildings, five deepwater piers, five dry docks including two of the nation's largest, light and heavy industrial facilities *(Continued on page 5)*

"Who Ordered the Short Stack"?

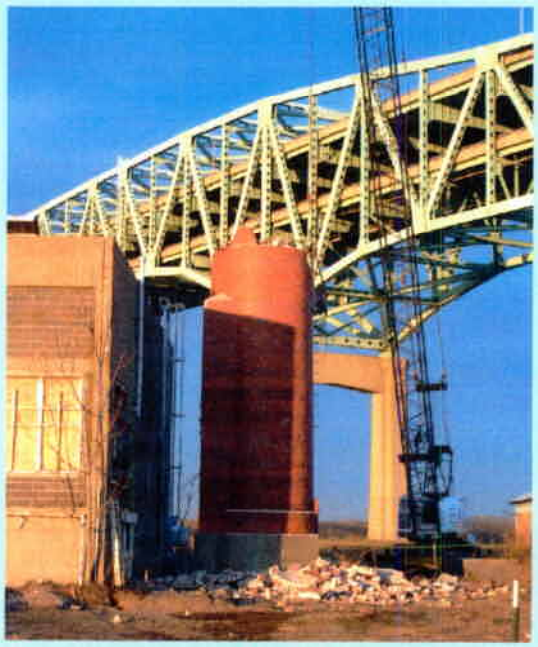
By Joe Roche

Head, Compliance Management Branch

The environmental cleanup of the old incinerator at the former Philadelphia Naval Base was successfully completed in March. Constructed in 1941, the incinerator was used to treat solid waste until 1970.

The cleanup effort included removing metal structures, debris and incinerator ash, dismantling two incinerator units and demolishing the incinerator stack. Since implosion was not practical, the structure was dismantled (see photo at right) using a 125-ton conventional crane and "clamshell."

Several challenges were addressed during the cleanup: protecting barn owls roosting in the incinerator's rafters, obtaining electrical power to the area and abating asbestos. The cleanup was accomplished by the Navy's remedial action contractor (RAC), Foster Wheeler Environmental Corp.



From the Department Head's Desk

By Conrad Mayer, P.E.
Head, Environmental Department

We've had some personnel actions recently, and I'm pleased to announce the selection of Mary Hunt and Curt Frye for our two team environmental coordinator positions, and the reassignment of Bill Mansfield to act as our on-site representative at Commander, Northeast Region.

Mary and Curt will fill newly created positions on NorthDiv's Delaware Valley and New England teams respectively. They will be responsible for coordinating delivery of environmental engineering and compliance services to client activities. This will include identifying clients' requirements, directing tasks to action components, tracking and facilitating project execution and NEPSS support, and reporting progress to clients and fellow team members. In short, they serve as an important link between the environmental core, the teams and our clients for the delivery of environmental compliance products and services.

Bill has been re-assigned from the Caretaker Site Office, where he is finishing up the BRAC transfer of the former NUWC New London property. He will be filling another newly created position – environmental liaison to Commander, Northeast Region. (This position was discussed in the previous issue of ***Environmental News.***) I'm sure many of you know Bill, as he is a veteran of the Navy's environmental community!

From my perspective, these positions do not change established lines of communication – rather, they expand them. Existing working relationships remain in place. We are moving away from departmental thinking (stovepipes) to a business line mentality. Mary, Curt and Bill are strategically placed where they can best improve the delivery of environmental compliance support to our clients.

We encourage readers to view and/or download NorthDiv's

"Environmental News"

in full color at

www.efdnorth.navfac.navy.mil

ENVIRONMENTAL News
Northern Division, Naval Facilities Engineering Command

NORTHDIV Environmental News
is a quarterly publication of the
Environmental Department
Northern Division
Naval Facilities Engineering Command
10 Industrial Hwy, Mail Stop 82
Lester PA 19113-2090

www location: http://www.efdnorth.navfac.navy.mil

DSN 443-0567; COMM (610) 595-0567 FAX -0555

The Northern Division Environmental Department does not endorse companies or products mentioned. Our primary target audience consists of Navy people at activities in our area of responsibility (the northeastern states) who are involved in environmental programs. The views and opinions expressed in this publication are not necessarily those of the Department of the Navy. We invite your contributions, comments and questions. To hold down costs, the Environmental News is printed in black and white. Visit our website if you prefer to view or print a full-color version.

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GIS Helps Decision Makers Use Long-Term Monitoring Data

By Peter Nimmer, P.G.
EA Engineering, Science, and Technology

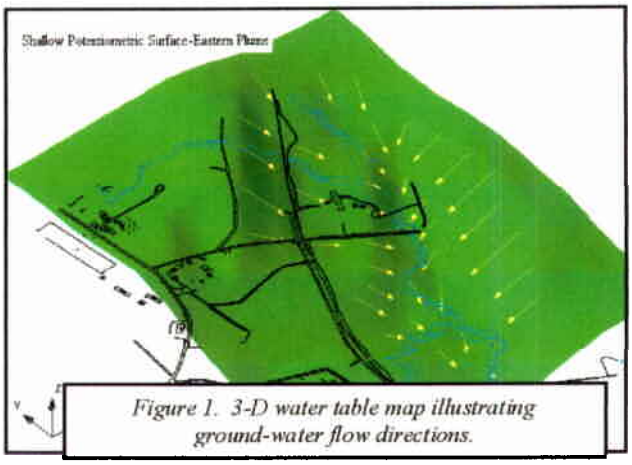


Figure 1. 3-D water table map illustrating ground-water flow directions.

Brunswick, Maine The Navy has been collecting environmental data at Naval Air Station Brunswick, Maine, since 1995 as part of long-term monitoring sampling at five installation restoration program sites. An extensive database of more than 100,000 analytical sample record results has been compiled. The geology of the site is complex and includes shallow and deep aquifers. More than 400 boring logs and cross sections for the site are used to define the site geology and contaminant transport pathways.

Managing and interpreting this data became a real challenge. Data review was slow and difficult, and the volume of existing environmental data slowed the data interpretation. To alleviate these problems, a geographic information system (GIS) project was set up by EA Engineering, Science, and Technology. The GIS project was completed using a combination of "off-the-shelf" software, including ArcView GIS, Adobe Acrobat document viewer, and Microsoft Access database.

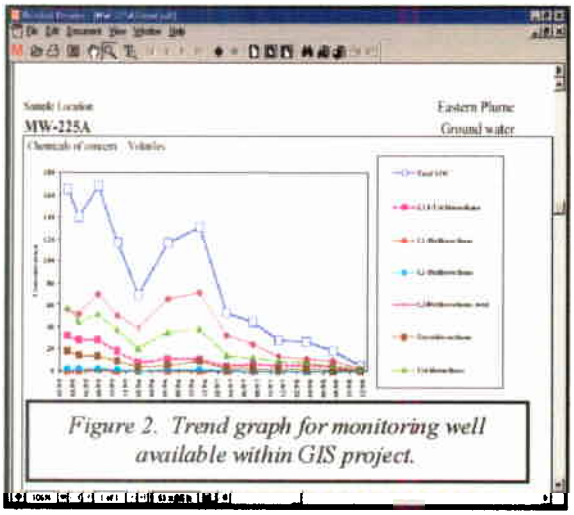


Figure 2. Trend graph for monitoring well available within GIS project.

Physical characteristics of each site are illustrated in the GIS by themes that include U.S. Geological Survey topographic maps and digital orthophotos with a resolution of three feet. Animations of plume movement were created as an effective tool to illustrate five years of sampling data.

The GIS has proven to be a useful tool for displaying complex data, such as plume migration over time and plume interactions with site geology. The GIS is updated when additional data is available and distributed to site decision makers. This tool has become an important resource to not only help decision makers focus on the actual data, but also spend less time collecting information.

The GIS includes a complete database of laboratory analytical data results. Using this tool, searches for sampling points or chemical concentrations are conducted quickly and results are displayed graphically. In addition, the trend graphs produced illustrate long-term contaminant concentrations at each data point. Trend graphs can be launched from any monitoring point simply by clicking on that location.

Boring logs and geologic cross sections are also available to the user with a single click. Geologic cross-sections can be generated in nearly any location and displayed with chemical data to determine trend changes within differing aquifer layers.

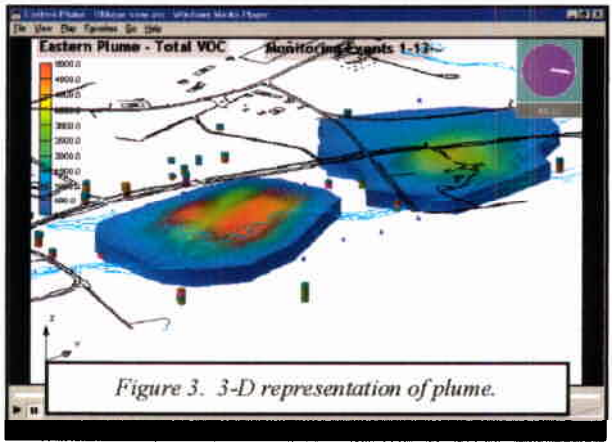


Figure 3. 3-D representation of plume.

[Editor's Note: EA is a NorthDiv CLEAN contractor. To subscribe to the Tri Service CADD/GIS Bulletin published by the CADD/GIS Technology Center for Facilities, Infrastructure, and Environment, go to http://tsc.wes.army.mil/news/bulletins]

NETC Newport's Connel Manor Housing Transferred to City of Newport, RI

Redevelopment to Community College Satellite Campus Planned

By Joe Roche
Head, Compliance Management Branch

In 1999, special legislation facilitated conveyance of property from the Naval Station (NAVSTA) Newport, Rhode Island, to the City of Newport. The purpose was to transfer Connel Manor Housing area so it could be redeveloped primarily as a satellite campus of the Community College of Rhode Island.

Most of the 14.53 acres will be developed. Planned facilities include a soccer field, day care center, and possibly some City of Newport administrative spaces. The conveyance was identified as a high-priority project with a tight schedule.

Critical to the transfer were the completion of environmental documentation, including the environmental baseline survey (EBS) and the finding of suitability to transfer (FOST).

A team of professionals from NorthDiv and NavSta Newport worked hard to ensure that the EBS and Fost were completed on schedule. Those responsible for the accomplishing this work included: NorthDiv (Steve Beebe – project team leader, Dominic DiGiantomasso, Jim Mills, Jim Shafer, Thom Snyder and Ralph Lombardo) and NAVSTA (Dave Dorocz, Jim Sprague, Peter Palmerino, Melissa Griffin, Bernice Snyder, and Mark Sylvio).

Teaming with the Navy was the City of Newport's Alan Goodwin, who assisted in coordinating their redevelopment plans and schedule. The property was successfully transferred in early 2000.

B O H I C A

EPA's recent *FedFacs* semiannual environmental bulletin for federal facilities contained a charming section called "The Hammer." This is where EPA tells its readers about alleged violations, improprieties, noncompliance, failures, citations, penalties, hearings, and settlements at regulated federal facilities.

But "The Hammer." as a metaphor, is already taken. It is being used by the Vice President to honor people in government for innovative solutions. So at Northern Division we ran a contest to pick another tool we could recommend to EPA as a symbol for its federal compliance program. Suprisingly, "the screwdriver" was only runner up.

The winner, submitted by an employee who wishes to remain anonymous, is "The Sigmoidoscope." All kidding aside, perhaps the name that would best set the tone for EPA – federal facility cooperation **to avoid violations** would be, "The Partners."

BRAC Flash: Philly Transfered

(Continued from front page)

as well as administrative office buildings, housing, and recreational facilities. The former Naval Base is now known as the Philadelphia Naval Business Center.

The Navy Department also conveyed the Philadelphia Naval Hospital to the City on April 20. The hospital was conveyed by way of a negotiated sale to the City of Philadelphia. The hospital was designated for closure in the 1988 round of BRAC. The Naval Hospital closed in 1991, and its clinical activities were moved to the former Naval Station Philadelphia in 1993. The conveyed property covers about 50 acres on Broad Street within the city near Veterans Stadium.

The former Philadelphia Naval Hospital stands empty. Demolition and redevelopment may come soon.

Key to the transfer was completion of the environmental cleanup. A team of over 50 people contributed to the success of the environmental work. The effort addressed 11 installation restoration (IR) sites, 129 RCRA solid waste management units/areas of concern, 50 environmental baseline study (EBS) areas of concern, 17 PCB remediation areas, 12 tank sites and asbestos abatement in over 150 buildings.

Teaming with the Navy for over six years to meet the cleanup milestones were the EPA Region III, the Pennsylvania Department of Environmental Protection and the Philadelphia Industrial Development Corporation. The Navy's environmental team consisted of the following partners: NorthDiv, ROICC Philadelphia, Caretaker Site Office, Public Works Center, Naval Ships Systems Engineering Station (now, Naval Surface Warfare Center / Carderock Division), Naval Station, Naval Shipyard, and Navy contractor representatives.

NorthDiv's beaming CO (CAPT Joe Zorica) and NorthDiv BRAC Team Realty Specialist Greg Preston flank PIDC's John Grady as the Philadelphia Navy properties are conveyed.

Property reuse and economic revitalization are continuing at a steady pace. Kvaerner Philadelphia Shipyard is utilizing Dry Docks Four and Five and the surrounding area to construct its first container cargo ship, "Philadelphia CU2600." The vessel is scheduled for completion in the summer of 2002. Metro Machine's new Metro yard is built around Dry Docks Two and Three. Metro has a five-year contract with the Navy to maintain four combat support ships.

On September 7, 1999, the Department of the Navy entered into a lease with the City of Philadelphia for part of the Naval Hospital property. The lease allows the city to build athletic fields and a training facility on the site for the Philadelphia Eagles professional football team. The city's reuse plan further proposes to demolish all the buildings on the site; use some of the property to expand adjacent parkland; and build a townhouse development.

[Editor's Note: Joe Roche, as the author of this article, readily and appropriately gives credit to the many people that provided outstanding support to make the Philadelphia Naval Base environmentally suitable to transfer to the city. Only space restrictions prevented him from listing all 50 or so people who contributed. But, we would be remiss if we did not acknowledge the tremendous performance that Joe himself delivered as the BRAC environmental coordinator. He provided leadership to all involved, steering the course through many complex and sensitive issues, and earning recognition up through the Assistant Secretary of the Navy.]

The Calm Before The PHASE II Storm

By Elizabeth Glancey
Air and Water Branch

Phase II, the much-anticipated additional measure in storm water regulation, has been finalized. With this regulation on the books, the Navy faces some changes in the way it has traditionally operated in three areas.

The first issue entails defining regulated, small municipal storm sewer systems (MS4s). This is of special importance since the new directive now classifies "the United States" as a potential owner/operator of an MS4, thereby requiring federal facilities to obtain permits where they had not previously been needed. Another item of interest is construction activity that disturbs one to five-acre sites. Finally, the "no exposure" exclusion for industrial facilities, a category that a number of Navy facilities fall into, has been revised.

Phase I of the storm water program, published November 1990, included the categories: municipal storm sewer systems serving populations over 100,000, construction sites over five acres, and industrial activities. The final storm water phase II rule was signed on October 29, 1999, and became effective February 7, 2000. Those affected have until March 10, 2003 to obtain a storm water permit from their National Pollutant Discharge Elimination System (NPDES) permit authority. Application for permit under phase II is similar to that of phase I. For example, if your NPDES permitting authority has issued a general permit that is applicable to your discharge, and you wish to be covered under the general permit, you must submit a notice of intent (NOI). You may file your own NOI, or you and neighboring municipalities or government entities may jointly submit an NOI.

The storm water phase II rule requires that small MS4s serving populations under 100,000, located in urbanized areas (as defined by the Bureau of the Census), obtain an NPDES permit. A small MS4 is defined as any MS4 not categorized as medium or large and not already covered by Phase I. As stated in the regulation, "This term (MS4) also includes systems similar to separate storm sewer systems in municipalities, such as systems at military base." According to the Bureau of the Census, "an urbanized area comprises a place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people." To determine whether your facility qualifies as an urbanized area, refer to Appendix 6 of the preamble of the phase II regulation.

The final rule also added "the United States" as a potential owner/operator of an MS4; therefore "Federal Facilities are covered by the NPDES program for municipal storm water discharges." While a number of larger bases are already covered under Phase I of the storm water regulation due to operation of an industrial facility, additional unregulated facilities may be required to obtain permits if they are located within an urbanized area and have an independent storm system (i.e. "system" of conveyances). In response to comments received, EPA clarified that the definition of a small MS4 does not include individual buildings, since these buildings may have an MS4, but they do not have a "system" of conveyances. As a result, a federal complex of two or three buildings could be treated as a single building and not be required to apply for coverage. It is up to the permitting authority to ultimately decide whether a complex should be a regulated small MS4.

Furthermore, phase II requires operators of construction sites disturbing one to five acres of land to obtain an NPDES permit and implement best management practices to minimize pollutant runoff. Besides construction disturbing between one to five acres, construction activity disturbing less than one acre would also require a permit if it is part of a larger common plan of development disturbing one acre or greater. Similarly, construction sites that disturb less than an acre of land may be brought into the program if deemed necessary by the NPDES permitting authority.

The third topic addressed by the new phase II rule applies to discharges associated with industrial activity. For those facilities already covered under phase I of the storm water program, this new standard contains a revision to the "no exposure" exclusion. Discharges composed entirely of storm water are not categorized as associated with industrial activity if there is "no exposure" of industrial materials and activities. No exposure means protected by a storm resistant shelter to prevent subjection to rain, snow, and/or runoff. However, shelter is not required for drums, barrels, tanks or other containers that are tightly sealed–provided they are

(Continued on page 8)

Does Anyone Else Have This Problem?

Freeze Protection for Flowing Artesian Monitoring Wells in Cold Climates

By Russ Turner
Senior Project Manager, Tetra Tech NUS

Freeze-damaged monitoring well.

At two sites in Pennsylvania, the Navy has installed bedrock aquifer monitoring wells in artesian zones resulting in flowing conditions at the well head. If the groundwater happens to be contaminated with known hazardous constituents (which is generally the reason the monitoring well was installed in the first place), it is not acceptable to allow the well to discharge to the surface. Typically, the well installer fits the well head with a screw cap and integral ball or gate valve to control flow and allow for sampling.

The Problem

If groundwater is not permitted to flow during cold weather, or the well head is not protected from the cold in some other way, these installations are likely to freeze. Repeated freezes, or even a single freeze-up, can damage the flow-control valve or the monitoring well riser pipe, resulting in a crack and a leak that will flow until a costly repair is made.

The Solution

A simple and effective method to avoid freeze damage is to insert an inflatable pneumatic plug (test ball) down the monitoring well below the frost line and inflate it to make a water-tight seal. With the test ball inflated to the manufacturers maximum recommended pressure, there is sufficient friction to hold the test ball in place after the water standing above the plug in the riser pipe is removed.

Typical Pneumatic Plug Hardware.

Unfortunately, as the test ball manufacturer's safety instruction manual explains, a small volume of inflation air may, over time, leak through the elastomeric body of the pneumatic plug. If the lost inflation air is not replaced, reduced friction between the monitoring well riser pipe and the test ball plug may eventually lead to failure of the seal against the rising groundwater. We have experienced this type of pneumatic plug failure and the resulting (undesirable) flowing conditions, particularly in our small diameter (two-inch) monitoring well installations.

(Continued on back page)

[Editor's Note: This issue of Environmentl News was edited with a U.S. Government Skilcraft ***recycled*** number two medium soft pencil.

Can somebody please tell us: How do you recycle a pencil?]

Phase II Storm

(Continued from page 6)

not deteriorated and do not leak. In addition, this modification requires industrial operators claiming "no exposure" to submit signed certification once every five years to the NPDES authority, allow inspection of the facility to verify the condition exists, and make reports available to the public upon request.

To ensure that compliance to the new rule is achieved, there are a number of steps to be taken. As an operator of regulated MS4, one must adhere to certain NPDES permit requirements. The first directs the development, implementation, and enforcement of a storm water management program designed to reduce the discharge of pollutants into the storm water. By the end of their first permit term (typically five years), operators would have to fully implement this storm water management program. There is also a list of six minimum control measures that the operator should follow to ensure compliance with the new rule. For some of these steps, there were comments made to the EPA concerning the definition of the word "public." For the purpose of this rule, EPA has agreed with DoD that the term "public" for DoD facilities would be the population (i.e., employees and military families) inside the fence line of the facility. The following is the list of control measures:

1. Implement a public education program to inform individuals and households about the impacts of storm water and steps they can take to reduce pollution.

2. Involve the public to participate in the planning and review of the storm water management program.

3. Develop, implement, and enforce a program to detect and eliminate illegal discharges into the MS4. This also includes a method of informing the public of the hazards associated with unauthorized discharges and improper disposal of waste as to prevent such events from occurring.

4. Create a program to reduce pollutants in storm water runoff from construction activities disturbing greater than or equal to one acre of land.

5. Execute a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre. An important aspect of this step is the ensured adequacy of long-term operation and maintenance of best management practices (BMPs).

6. Implement an operation and maintenance program, the ultimate goal of which is the prevention or reduction of pollutant runoff from municipal operations.

Once these steps have been taken, it is important to step back and evaluate program compliance, the applicability and appropriateness of identified BMPs, and the progress made toward achieving measurable goals.

After the NPDES permit has been received, there are some other measures that should be followed as well. To begin, all records required by the NPDES permit must be kept for at least three years. These records must be made readily available to the public at reasonable times during normal business hours. Moreover, annual reports must be submitted to the NPDES authority for the first permit term. Subsequent terms would require reports in years two and four unless otherwise noted by the NPDES authority.

To aid in the compliance process, EPA and the Navy are currently working together to develop a training course on the entire NPDES storm water program. EPA in cooperation with the Navy developed a pilot training course, which was offered in December 1999. (See page 10 for course and workshop training schedule.)

The following are milestones for the implementation of Phase II:

Dec. 8, 1999: The final Phase II Rule is published in the Federal Register.
Oct. 2000: EPA will issue a menu of recommended BMPs for regulated small MS4s.
Oct. 2001: EPA will issue guidance on the development of measurable goals for regulated small MS4s.
Dec. 8, 2002: The NPDES permitting authorities are required to issue general permits for Phase II regulated small MS4s and small (less then five acres) construction activity.
March 10, 2003: Operators of Phase II regulated small MS4s and small construction activity are required to obtain permit coverage.

For more information on storm water Phase II, contact Al Rhoads, Stormwater Manager, at (610) 595-0567 x135.

RAC AWARDED

A five-year, $125 million cost-plus award fee remedial action contract (RAC) for Northern Division's 10 state area was awarded on March 2 to Foster Wheeler Environmental Corporation of Livingston, NJ.

NorthDiv Studying Work Space Changes

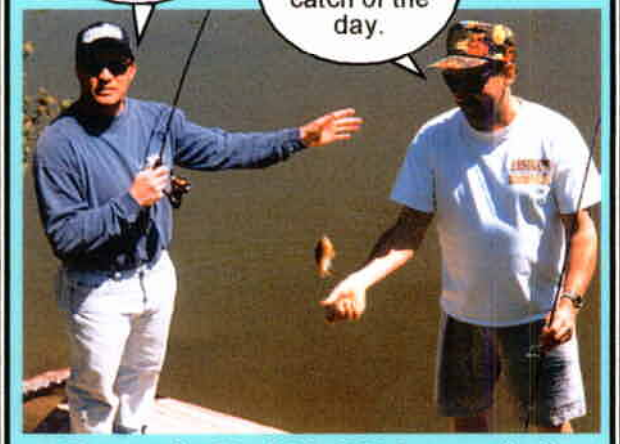
This workspace consolidation proposal was shot down by the front office. Furthermore, the designer was informed that this is not what was meant by the trickle-down theory.

Non-Essential Fish Need Not Apply

CNO N45 has announced the availability of a guidance manual for all Navy installations that require consultation on essential fish habitat with the National Marine Fisheries Service.

The manual can be accessed electronically at http://www.nmfs.gov/habitat/efh

CARPE DIEM?



Two macho NorthDiv RPMs proudly show off their entry in a Team Catch and Release Muskellunge tournament. We heard it took both these guys to land this "baby."

ADM ELMO R. ZUMWALT

ADM Elmo R. Zumwalt passed away just after the start of the new millennium. Those who follow environmental issues know that ADM Zumwalt defended his use of Agent Orange in Vietnam stating that many American lives were saved because of Agent Orange.. He did so even after his son, ironically, died of exposure to the controversial defoliant.

Now the part of the story you may not know: ADM Zumwalt died of mesothelioma, a cancer of the lining of the lung caused by exposure to asbestos. Mesothelioma is not uncommon among people who were involved in overhauling ships.

NASA Using NorthDiv Contract for Cleanup at Langley

ROICC Peninsula

The National Aeronautics and Space Administration's (NASA) Langley Research Center in Hampton, VA, is using a NorthDiv remedial action contract (RAC) to clean up Tabbs Creek. Work under this contract is being managed by the Resident Officer in Charge of Contracts, Peninsula.

Tabbs Creek is a meandering creek that, along with more than 20 tributaries, flows into the northwest branch of the Back River. It was contaminated with PCBs (polychlorinated biphenyls) and PCTs (polychlorinated terphenyls) that were inadvertently discharged into storm sewers and eventually deposited in the creek. NASA Langley cleaned up the contaminated source and the storm sewers in 1997.

This aerial view, looking toward NASA Langley, shows the temporary road being built at Tabbs Creek. Heavy equipment needed to excavate sediment from the creek will use the road. The road will be dismantled when the project is completed.

The $8 million project began in December and is expected to be completed the end of May. It involves removing about 10,000 cubic yards of sediment over a distance of 750 feet down the creek. Because the creek is not straight, the contractor built a 1,500-foot earth road across the creek to provide access for equipment. The sediment will be dyed, processed and loaded into sealed trucks for disposal off-site at approved facilities. The road will be removed when the cleanup is completed.

"Everything is going very well" said LT Jim Watts, AROICC. Bill Pleasant is the ConRep on the project.

[Reprinted from *The Atlantic Observer*, Winter 2000]

Did You Know?

According to John Shanahan, "How to Rescue Superfund," and Sterling Burnett, "Five Principles for a Better Environment," between 36 and 60 cents of every federal dollar spent on Superfund has gone to lawyer's fees and other transaction costs?

Biological Lawn Mowers

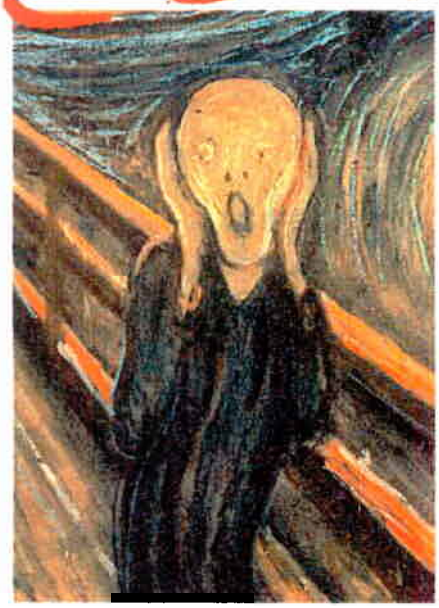
The Naval Air Station in Willow Grove, PA has enlisted the help of seven sheep to "keep the base's 1,200 acres in fighting trim." As reported in a recent edition of the Philadelphia Inquirer Sunday Magazine, a local shepherdess tends the flock at no charge. She gets free wool, and the Navy cuts down on pollution, labor, equipment, gasoline and oil.

EPA Storm Water Program Training

Location	Course	Workshop
New Orleans	June 20-21	June 22
San Diego, CA	August 15-16	July 27
Denver, CO	Sept. 26-27	Sept. 28
Newport, RI	Oct. 24-25	Oct. 26
Tampa, FL	Nov. 28-29	Nov. 30

For updated course, schedule, and location information or to pre-register, go to:
http://www.epa.gov/owm/sw/training/

EEEEH-Mail of the Quarter



[Editor's Note: This is a reprint of an e-mail sent by former NorthDiv Operations Officer (CDR Coleman) to aid the field offices. It was prepared by Thom Snyder.]

USEPA and the states are becoming more aggressive in the enforcement of the Clean Air Act for asbestos (NESHAPS). The Department of Justice ruled on 16 July 97 that EPA may fine federal installations for Clean Air Act violations. Minor violation fines are $5,000 per day per violation, and major violations are $27,500 per day per violation. States may have more stringent requirements.

The EPA NESHAPS asbestos regulation (40 CFR 61, Subpart M) requires specific surveys, training, removal methods and handling, disposal and record keeping. Renovation and demolition work that involves asbestos removal is subject to this regulation. EPA in 40 CFR 763, Model Accrediation Plan for public and commercial buildings also requires that "trained individuals" perform all survey, design and removal work.

Naval Facilities Engineering Service Center (NFESC) has developed technical manuals to aid in asbestos project construction management. Contact NFESC at Comm. (805) 982-1971 or DSN 551-1971 for copies of these field procedure manuals for asbestos projects.

A short summary of EPA regulations and their application to the Navy design and construction process follows:

- **Surveys:** (40 CFR 61.145) Prior to renovation/demolition, an asbestos survey is required. Most activities have an asbestos inventory, which provides part of the survey data. Additional sampling and testing is required during the project design phase to identify any additional asbestos-containing materials (ACM). Where demolition work will occur (even as part of renovation), destructive testing is required to determine if there are hidden materials present. An asbestos survey is required as part of design scope of work. This survey is to be provided at the 35% submittal (design analysis) review. Ensure the activity asbestos program manager (APM) receives a copy for review. The APM will retain a copy of the survey.

- **Design and Construction:** (40 CFR 763 amended) An EPA-accredited project designer is required to prepare specifications for removal of ACM. Our guide specification NFGS-13281 is performance-based. We rely on the contractor to propose the "means and methods" for removal. Persons who approve the contractor's asbestos hazard abatement plan, and any change orders, must be trained as project designers.

- **Notification:** (40 CFR 61.145) A detailed notification form must be prepared and sent to the EPA, state or city by the contractor. In some instances, design or other survey data must be included. Survey data must also be available during construction. The notification form must also be posted at the work site.

- **Construction:** (40 CFR 61.145) A trained contractor employee (asbestos supervisor) is required to be on-site during removal. Contractors must meet emission control requirements by proper

(Continued on page 12)

(Continued from page 11)

handling, ***adequately wetting,*** lowering materials from elevations, and using appropriate ventilation controls. No visible emissions are permitted during removal.

- **Waste Disposal:** (40 CFR 61.150) Visible emissions are not permitted during the collection, processing, packaging or transporting of ACM waste. Waste materials must be ***adequately wet,*** sealed in leak-tight wrapping or containers, and labeled with the building owner (activity) name and location. When ACM is disposed off-site, ensure there is a certification that the contents are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, ***and are in all respects in proper condition for transport by highway according to applicable regulations.*** The bottom line here is that we are liable for ACM even at the landfill.

- **Record Keeping:** Ensure waste shipment records (WSRs) are signed before leaving Navy property and meet the waste disposal requirements listed above. Navy representatives (usually an APM or hazardous waste program specialist) are responsible for signing the WSR. If a signed copy of the WSR is not received in 35 days, notify the transporter. If it is not received in 45 days, notify the State or EPA. Records must be kept for a minimum of two years, to satisfy the regulators, but the Navy keeps them even longer.

NavFac contract offices are **strongly encouraged** to work with the activity APM to ensure compliance with federal and applicable state or local regulations. Where independent (third party) monitoring contracts are in place, the on-site monitor should ensure requirements are met.

Additional technical assistance is also available from USEPA and OSHA web sites (www.epa.gov or www.osha.gov). Regulations and interpretations are provided. OSHA also provides "expert system" software in the "Outreach" section of their home page. Download the software and follow the directions.

NorthDiv's technical points of contact are Thom Snyder, (610) 595-0567, ext. 172 DSN 443 and Tom Stephan (610) 595-0567, ext. 169 DSN 443.

Dave Barclift Wins DRUM "E"

Dave Barclift, an ecological and human health risk assessor in NorthDiv's IR program, was the recipient of the 1999 CNO sponsored DRUM "E" award. This award is given annually to the NorthDiv employee who has made the most significant contribution to the installation restoration program.

Dave received the award at the site cleanup conference in February He was recognized for several outstanding efforts. He provided technical support for an ecological sediment study that saved $2 million; partnered with regulators to avoid a projected $60,000 outlay for unnecessary sampling; and played a significant role in preparing a proposal that is bringing a $450,000 NFESC-sponsored TEI study to NorthDiv's client footprint.

Although they weren't selected for the award, others nominated by their peers who made outstanding contributions to the program were Todd Bober, Tom Gibison, Emil Klawitter, Mark Leipert and John Mayhew.

***Dave Barclift** (left) accepting the 1999 CNO sponsored DRUM "E" award from CNO N4's Dave Olson. The engraved award is fashioned in the form of a miniature 55-gallon steel drum (see photo inset at top left).*

Environmental Department Observes Earth Day 2000

Joe Rhyner Receives Gillespie Award

Traditionally, the annual observance of Earth Day is a time for NorthDiv's environmental community to pause and reflect on its accomplishments during the past year.

This year's celebration was doubly important as it marked the first Earth Day of the new millennium and provided us the opportunity to renew our commitment as caretakers of the Navy's environment. Befittingly, this year's theme was *"Preserving Our Past, Protecting Our Future."*

One of the highlights of the Earth Day observance is the presentation of the Richard L. Gillespie Award for environmental excellence. The recipient of this year's award was Joseph R. Rhyner. Joe has become recognized as a leader in Northern Division's wastewater program, providing unequaled support to our Navy customers.

Joe was NorthDiv's lead on an oily bilgewater disposal issue at NWS Earle, NJ. Joe stepped up to the plate to quickly investigate the problem. He researched available files to find historical information on the existing undersized treatment system, developed cost estimates and prepared a report for LantFlt's use in programming a corrective action.

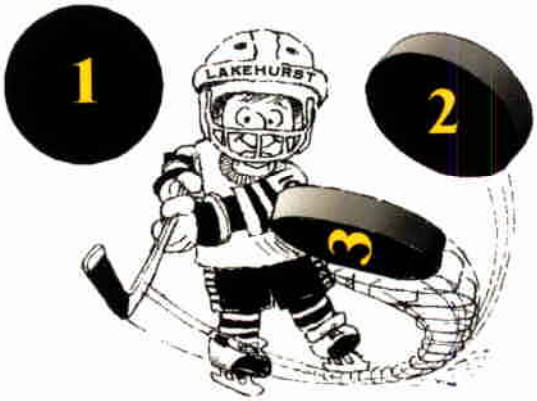
Other projects that exemplify Joe's outstanding performance include the NPDES permit renewal for the cooling water discharge into the Thames River from the NSB New London Power Plant; an NPDES permit renewal application for NAS Willow Grove, PA; a HW database conversion for the NSB New London, CT; and a wellhead protection study at Prospect Harbor, ME.

In addition to the above-mentioned projects, Joe is also knowledgeable in the Arcview GIS system and chairs a GIS PAT team. His dedication and team spirit have helped the NorthDiv environmental team accomplish its goal: Improving the environment and protecting public health at our client Activities.

NorthDiv's traditional Earth Day pastry. Who says you can't have your cake and eat it too?

Environmental Department head Con Mayer reads Gillespie Award citation to 2000 recipient Joe Rhyner (center) as NorthDiv CO, (CAPT Joe Zorica) and former Environmental Department head Dick Gillespie look on.

Hat Trick for Lakehurst



The Naval Air Engineering Station, Lakehurst, NJ, has won three 1999 Secretary of the Navy environmental awards:

1. **Environmental quality, non-industrial installation, (winner)**
2. **Natural resources conservation, small installation, (runner-up)**
3. **Environmental cleanup, installation (runner-up)**

Bravo zulu, NAES; we hope you don't mind us taking pride in and perhaps even basking vicariously in the glow of your environmental glory. At the rate you are earning environmental acclaim, you'll need a milcon project for a facility to house the awards.

Freeze Protection for Monitoring Wells

(Continued from page 7)

If Air Loss Occurs

Fortunately, there is a relatively simple and inexpensive solution to the inflation air loss problem.

Inflation air make-up tank

A portable tank of compressed air (fitted with a pressure regulator) can be used as an inflation air make-up reservoir. Pressure in the pneumatic plug can be maintained at the maximum recommended inflation pressure for long periods of time using this technology.

We have had good results using this type of installation for the Navy. A compressed air reservoir tank installed in December 1999 at our most troublesome two-inch flowing monitoring well has prevented the flow of contaminated groundwater

Typical installation of make-up air tank

without incident for almost three months last winter. Make-up tank reservoir pressure has dropped only marginally (less than two psig) compared to the original tank pressure of 95 psig. Regulated pressure to the test ball (approximately 37 psig) has not changed over the period.

Conclusion

The use of pneumatic plugs in conjunction with a regulated source of make-up inflation air should prove effective at stanching artesian flow conditions in monitoring wells for at least one year from installation. Annual inspection and maintenance of the pneumatic plug and air make-up system are recommended.

[Editor's Note: Tetra Tech NUS is a NorthDiv CLEAN contractor.]

Personals

Frank Cellucci from the Philadelphia ROICC recently completed a timely 30 day leadership development assignment through NorthDiv Environmental. Frank, an experienced ROICC project manager, said the rotation provided him the intended developmental and environmental experience and also allowed him to share his ROICC experience and perspective with NorthDiv Environmental.

Lien Nguyen-Gale, an environmental engineer in the Hazardous Waste branch, gave birth to a baby girl, Thy-lan Nguyen-Gale on April 19. Mother and baby are doing fine.

Welcome aboard to **Art Coccoli,** who recently joined us from Tim Bramhall's environmental design branch. Art will be working on the IR Program for NAS Brunswick.